

SEQUENCE LISTING

<110> Universiteit Utrecht Strous, Gerardus Van Kerkhof, Petrus Govers, Roland

<120> CONTROLLING AVAILABILITY OR ACTIVITY OF PROTEINS BY USE OF PROTEASE INHIBITORS OR RECEPTOR FRAGMENTS

<130> 2183-4525US <140> 09/660,302 <141> 2000-09-12 <150> PCT/NL99/00136 <151> 1999-03-12 <150> EP98200799.9 <151> 1998-03-12 <160> 51 <170> PatentIn version 3.0 <210> 1 <211> 8 <212> PRT <213> Unknown <220> <221> BINDING <222> (1)..(8)<223> synthetic peptide, Binding polypeptide motif <220> <221> UNSURE <222> (1)..(1)<223> Xaa may be any amino acid <220> <221> UNSURE <222> (5)..(5)<223> Xaa may be any amino acid <220> <221> UNSURE <222> (6)..(6) <223> Xaa may be any amino acid <220> <221> UNSURE <222> (8)..(8) <223> Xaa may be any amino acid <400> 1 Xaa Glu Phe Ile Xaa Xaa Asp Xaa <210> 2

```
<211> 12
<212> PRT
<213> Unknown
<220>
<223> Unsure, Growth hormone receptor binding motif, Binds to hormone receptor and
<400> 2
Asp Asp Ser Trp Val Glu Phe Ile Glu Leu Asp Ile
<210> 3
      10
<211>
<212>
      PRT
<213> Unknown
<223> Unsure, Growth hormone receptor motif, Binds to hormone receptor and
ubiquitin
Asp Ser Trp Val Glu Phe Ile Glu Leu Asp
<210> 4
<211>
      129
<212>
      PRT
<213>
      Unknown
<220>
<223> Unsure, Growth hormone receptor motif, Up-regulates GH activity
<400> 4
Ser Lys Gln Gln Arg Ile Lys Met Leu Ile Leu Pro Pro Val Pro Val
                                    10
Pro Lys Ile Lys Gly Ile Asp Pro Asp Leu Leu Lys Glu Gly Lys Leu
                                25
Glu Glu Val Asn Thr Ile Leu Ala Ile His Asp Ser Tyr Lys Pro Glu
Phe His Ser Asp Asp Ser Trp Val Glu Phe Ile Glu Leu Asp Ile Asp
Glu Pro Asp Glu Lys Thr Glu Glu Ser Asp Thr Asp Leu Leu Ser Ser
                    70
                                        75
Asp His Glu Lys Ser His Ser Asn Leu Gly Val Lys Asp Gly Asp Ser
                                    90
Gly Arg Thr Ser Cys Cys Glu Pro Asp Ile Leu Glu Thr Asp Phe Asn
            100
                                105
Ala Asn Asp Ile His Glu Gly Thr Ser Glu Val Ala Gln Pro Gln Arg
                            120
        115
Leu
<210>
<211>
       38
<212>
       PRT
<213> Unknown
<220>
```

<223> Unsure, Derived from protein receptor, Up-regulates GH activity

```
<400> 5
Lys Asp Gly Asp Ser Gly Arg Thr Ser Cys Cys Glu Pro Asp Ile Leu
                                   10
Glu Thr Asp Phe Asn Ala Asn Phe Ile His Glu Gly Thr Ser Glu Val
Ala Gln Pro Gln Arg Leu
        35
<210> 6
<211>
      10
<212>
      PRT
<213> Unknown
<220>
<223> Unsure, Glut4 Ins-regulated glucose transporter binding motif, Binds to
ubiquitin/proteasome system binding site
<400> 6
Thr Glu Leu Glu Tyr Leu Gly Pro Asp Glu
<210> 7
      7
<211>
<212>
      PRT
<213> Unknown
<220>
<223> Unsure, Binding poly-peptide motif, Binds to ubiquitin/proteasome system
binding site
<400> 7
Cys Glu Glu Asp Phe Tyr Arg
<210> 8
<211>
      10
<212>
      PRT
<213> Homo sapiens (human) or Lepus unknown species (rabbit)
<220>
<223> GHR sequence
<400> 8
Ser Trp Val Glu Phe Ile Glu Leu Asp Ile
<210>
      10
<211>
<212>
      PRT
<213> Gallus gallus (chicken)
<220>
<223> GHR
<400> 9
Leu Trp Val Glu Phe Ile Glu Leu Asp Ile
<210> 10
<211> 10
```

```
<212> PRT
<213> Homo sapiens (human)
<220>
<223> prolactin receptor
<400> 10
Leu Leu Val Glu Tyr Leu Glu Val Asp Asp
<210> 11
<211> 10
<212> PRT
<213> Mus musculus (mouse), Lepus unknown species (rabbit), or Rattus unknown
species (rat)
<220>
<223> prolactin receptor
<400> 11
Leu Leu Val Glu Phe Leu Glu Asn Asp Asp
<210> 12
<211> 10
<212> PRT
<213> Unknown
<220>
<223> Unsure, vertebrate skeletal muscle
Asp Asn Val Asp Tyr Leu Thr Arg Asp Trp
<210> 13
<211> 10
      PRT
<212>
<213> Unknown
<220>
<223> Unsure, FGF Receptor Family
Gln Ala Ala Glu Tyr Leu Arg Ser Glu Thr
<210> 14
<211> 10
<212> PRT
<213> Unknown
<220>
<223> Unsure, Transmembrane receptor sex precursor
Ile Asp Ala Glu Tyr Ile Ser Ala Glu Arg
<210> 15
```

```
<211> 10
<212> PRT
<213> Unknown
<220>
<223> Unsure, IgE Receptor
<400> 15
Leu Lys Gly Glu Phe Ile Trp Val Asp Gly
<210> 16
<211> 10
<211> PRT
<213> Unknown
<220>
<223> Unsure, ANGIOTENSIN CONVERTING ENZYME
Tyr Gly Ser Glu Tyr Ile Asn Leu Asp Gly
<210> 17
<211> 10
<212> PRT
<213> Unknown
<220>
<223> Unsure, POTASSIUM CHANNEL IRK
Ser Glu Gly Glu Tyr Ile Pro Leu Asp Gln
<210> 18
<211> 10
<212> PRT
<213> Unknown
<220>
<223> Unsure, PDGF RECEPTOR ALPHA-CHAIN
<400> 18
Asp Gly His Glu Tyr Ile Tyr Val Asp Pro
<210> 19
<211> 10
<212> PRT
<213> Unknown
<220>
<223> Unsure, PDGF RECEPTOR BETA-CHAIN
Asp Gly His Glu Tyr Ile Tyr Val Asp Pro
<210> 20
```

```
<211> 10
<212> PRT
<213> Homo sapiens (human), Lepus unknown species (rabbit), or Rattus unknown
species (rat)
<220>
<223> Ca++ -channel
<400> 20
Asp Asn Phe Glu Tyr Leu Thr Arg Asp Ser
<210> 21
<211> 10
<212> PRT
<213> Unknown
<220>
<223> Unsure, Cl- CHANNEL CLC7
<400> 21
Lys Ile Phe Glu Tyr Leu Arg Arg Asp Thr
<210> 22
<211> 10
<212> PRT
<213> Homo sapiens (human)
<220>
<223> TYROSINE-PROTEIN KINASE FRK
<400> 22
Ser Leu Gln Glu Tyr Leu Gln Asn Asp Thr
<210> 23
<211> 10
<212> PRT
<213> Unknown
<220>
<223> Unsure, GLUT4 INS-REGULATED GLUCOSE TRANSPORTER
<400> 23
Thr Glu Leu Glu Tyr Leu Gly Pro Asp Glu
<210> 24
<211> 10
<212> PRT
<213> Rattus unknown species (Rat)
<220>
<223> MHC-II(BETA)
<400> 24
Asn Gln Glu Glu Tyr Leu Arg Tyr Asp Ser
```

```
<210> 25
<211> 10
<212> PRT
<213> Unkown
<220>
<223> Unsure, ERB2 TKR (neu-oncogene)
<400> 25
Glu Asn Pro Glu Tyr Leu Gly Leu Asp Val
<210> 26
<211> 10
<212> PRT
<213> Unkown
<220>
<223> Unsure, ANION TRANSPORTER I
<400> 26
Arg Leu Lys Glu Tyr Leu Ala Gly Asp Val
<210> 27
<211> 10
<212> PRT
<213> Unknown
<223> Unsure, VASCULAR ENDOTHELIAL GROWTH FACTOR receptor 2
<400> 27
Leu Tyr Lys Asp Phe Leu Thr Leu Glu His
<210> 28
<211> 10
<212> PRT
<213> Unknown
<220>
<223> Unsure, VASCULAR ENDOTHELIAL GROWTH FACTOR receptor 3
<400> 28
Glu Gln Lys Glu Tyr Lys Ser Tyr Asp Ala
<210> 29
<211> 10
<212> PRT
<213> Unknown
<220>
<223> Unsure, G PROTEIN-ACT. INWARD RECTIFIER K+-CHANNEL-1
<400> 29
Pro Glu Gly Glu Phe Leu Pro Leu Asp Gln
```

```
<210> 30
<211> 10
<212> PRT
<213> Homo sapiens (human)
<220>
<223> PROTEIN-TYROSINE PHOSPHATASE ZETA
<400> 30
Ser Asp Ser Glu Phe Leu Leu Pro Asp Thr
<210> 31
<211> 10
<212> PRT
<213> Unknown
<220>
<223> Unsure, GLUTAMATE (NMDA) RECEPTOR SUBUNIT EPSILON 2
<400> 31
Ser Ala Leu Asp Phe Ile Arg Arg Glu Ser
<210> 32
<211> 10
<211> PRT
<213> Unknown
<220>
<223> Unsure, RHESUS BLOOD GROUP-ASSOCIATED GLYCOPROTEIN
<400> 32
Ala His Asn Glu Tyr Leu Val Ser Glu Ile
<210> 33
<211> 10
<212> PRT
<213> Unknown
<220>
<223> Unsure, DIHYDROPYRIDINE-SENSITIVE 1-TYPE, Ca++ Channel
<400> 33
Val Thr Leu Asp Phe Leu Asp Ala Glu Leu
<210> 34
<211> 10
<212> PRT
<213> Unknown
<220>
<223> Unsure, THROMBOPOIETIN RECEPTOR
<400> 34
Glu Ile Ser Asp Phe Leu Arg Tyr Glu Leu
```

```
<210> 35
<211> 10
<212> PRT
<213> Unknown
<220>
<223> Unsure, SEROTONIN RECEPTOR 1B (brain)
<400> 35
Ser Ala Lys Asp Tyr Ile Tyr Gln Asp Ser 1 \phantom{\bigg|} 5 \phantom{\bigg|} 10
<210> 36
<211> 10
<212> PRT
<213>, Unknown
<223> Unsure, EPIDERMAL GROWTH FACTOR receptor
<400> 36
Tyr Gln Gln Asp Phe Phe Pro Lys Glu Ala
<210> 37
<211> 10
<212> PRT
<213> Unknown
<223> Unsure, SODIUM, CHLORIDE-DEPENDENT TRANSPORTER NTT4
<400> 37
Ser Lys Leu Gln Tyr Ile Leu Ala Gln Ile
<210> 38
<211> 10
<212> PRT
<213> Unknown
<220>
<223> Unsure, RHODOPSIN
<400> 38
Thr Pro Leu Asn Tyr Ile Leu Leu Asn Leu
<210> 39
<211> 10
<212> PRT
<213> Unknown
<220>
<223> Unsure, INTERLEUKIN-2 RECEPTOR BETA-CHAIN
<400> 39
Thr Ser Val Asp Leu Leu Asp Ile Asn Val
```

```
<210> 40
<211> 10
<212> PRT
<213> Unknown
<220>
<223> Unsure, cAMP-DEPENDENT PROTEIN KINASE C, ALPHA, BETA
<400> 40
Gly Thr Pro Asp Tyr Ile Ala Pro Glu Ile
<210> 41
<211> 10
<212> PRT
<213> Unknown
<220>
<223> Unsure, cAMP-DEPENDENT PROTEIN KINASE DELTA, EPSILON, GAMMA
<400> 41
Gly Thr Pro Glu Tyr Leu Ala Pro Glu Ile
<210> 42
<211> 10
<212> PRT
<213> Unknown
<223> Unsure, SERINE/THREONINE KINASE PCTAIRE 1,2
<400> 42
Leu Val Phe Glu Tyr Leu Asp Lys Asp Leu
<210> 43
<211> 10
<212> PRT
<213> Unknown
<220>
<223> Unsure, SERINE/THREONINE KINASE PCTAIRE 3
<400> 43
Leu Val Phe Glu Tyr Leu Asp Ser Asp Leu
<210> 44
<211> 10
<212> PRT
<213> Unknown
<220>
<223> Unsure, SMALL GTP-BINDING PROTEIN Rab-7
<400> 44
Ile Gly Ala Asp Phe Leu Thr Lys Glu Val
```

```
<210> 45
<211> 10
<212> PRT
<213> Unknown
<220>
<223> Unsure, SMALL GTP-BINDING PROTEIN Rab-9
<400> 45
Ile Gly Val Glu Phe Leu Asn Lys Asp Leu
<210> 46
<211> 10
<212> PRT
<213> Unknown
<220>
<223> Unsure, SYNAPTOTAGMIN IV
<400> 46
Ile Ser Val Glu Phe Leu Val Leu Asp Ser
<210> 47
<211> 10
<212> PRT
<213> Unknown
<220>
<223> Unsure, GLUTAMATE DECARBOXYLASE (GAD67)
<400> 47
Ser Asp Ile Asp Phe Leu Ile Glu Glu Ile
<210> 48
<211> 10
<212> PRT
<213> Unknown
<220>
<223> Unsure, FRUCTOSE 1,6 DIPHOSPHATASE (FBPase)
<400> 48
Ala Ile Gly Glu Phe Ile Leu Val Asp Lys
<210> 49
<211> 10
<212> PRT
<213> Unknown
<220>
<223> Unsure, CYSTIC FIBROSIS TRANSMEMBRANE CONDUCTANCE REGULATOR
<400> 49
Gln Lys Gln Glu Tyr Lys Thr Leu Glu Tyr
```

```
<210> 50
<211> 5
<212> PRT
<213> Unknown
<220>
<223> Unsure, EPITHELIAL Na+ CHANNEL
<220>
<221> UNSURE
<222> (4)..(4)
<223> Xaa may be any amino acid
<400> 50
Pro Pro Pro Xaa Tyr
<210> 51
<211> 12
<212> PRT
<213> Unknown
<220>
<223> Unsure
<400> 51
Ser Trp Val Glu Phe Ile Glu Leu Asp Ile Asp Asp
```